

Abstract of the Disclosure

In a programmable fixed priority and round-robin arbiter and a bus control method of the same, the arbiter includes, an HPRIF rotating unit, a request-reordering unit, a request-selecting unit, and a grant-reordering unit. In the fixed priority mode or the round-robin mode, the HPRIF rotating unit rotates priority information related to bus masters stored in a predetermined register in a predetermined direction to give the highest priority to a bus master in response to pointer information and outputs changed priority information. When a request signal is received from the bus masters, the request-reordering unit reorders requested priorities of the bus masters to be in accordance with the changed priority information and outputs a request-reordering signal. The request-selecting unit outputs a bus master-selecting signal according to priorities in response to the request-reordering signal. The grant-reordering unit outputs a bus master grant signal to the bus masters according to priorities in response to the bus master-selecting signal.

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